

IN THE CLAIMS:

The following is a complete listing of all of the claims. Please amend the claims as follows:

1.-20. (Cancelled).

21. (Currently Amended) A dual frequency vibration absorber comprising:

a housing;

a first piston resiliently disposed within the housing, the first piston being adapted for connection to a first body;

~~a second piston resiliently disposed within the housing;~~

~~at least one actuator coupled to the second piston for selectively transferring forces to the second piston;~~

a first fluid chamber and a second fluid chamber, each being defined by the housing, ~~and the first piston, and the second piston;~~ a first tuning port in fluid communication with both the first fluid chamber and the second fluid chamber; a second tuning port in fluid communication with both the first fluid chamber and the second fluid chamber;

a first tuning port in fluid communication with both the first fluid chamber and the second fluid chamber;

a second tuning port in fluid communication with both the first fluid chamber and the second fluid chamber; and

~~a spring-mass system associated with the second tuning port, the spring-mass system being configured to provide an additional degree of freedom; and~~

a tuning fluid disposed within the first fluid chamber, the second fluid chamber, the first tuning port, and the second tuning port;

wherein the first tuning port allows isolation of harmonic vibration at a first selected frequency, the isolation of harmonic vibration at the first selected frequency being a result of displacement of the tuning fluid in the first tuning port, the displacement being a result of movement of the piston; ~~and the second port allows~~

isolation of vibration at a second selected frequency

wherein the second tuning port allows isolation of vibration at a second selected frequency, the isolation of vibration at the second selected frequency being a result of displacement of the tuning fluid in the second tuning port, the displacement being a result of movement of the piston.

22. **(Cancelled).**

23. **(Currently Amended)** The vibration isolator according to claim 21, ~~wherein the spring-mass system comprises comprising:~~

a spring-mass system associated with the second tuning port, the spring-mass system being configured to provide an additional degree of freedom.

~~a third piston; and~~

~~at least one spring associated with the third piston.~~

24. **(Currently Amended)** The vibration isolator according to claim 21, comprising:
additional tuning ports;

~~an additional spring-mass system associated with each additional tuning port
configured to provide an additional degree of freedom;~~

wherein each additional tuning port allows isolation of vibration at a corresponding additional selected frequency.

25. **(Currently Amended)** A vibration isolator comprising:

a first housing;

a first piston resiliently disposed within the first housing, the first piston being adapted for connection to a first body;

a tuning port in fluid communication with both a first fluid chamber and a second fluid chamber, the first fluid chamber and the second fluid chamber each being defined by the first housing and the first piston;

a second housing;

a second, multistage piston resiliently disposed within the second housing, the

second, multistage piston, being configured to define a first plurality of stages in fluid communication with ~~[[a]] the~~ first fluid chamber, and a second plurality of stages in fluid communication with ~~[[a]] the~~ second fluid chamber;

at least one actuator coupled to the second, multistage piston for selectively transferring forces to the second, multistage piston;

~~a first fluid chamber and a second fluid chamber, each being defined by the housing, the first piston, and the second, multistage piston; at least one tuning port in fluid communication with both the first fluid chamber and the second fluid chamber; and~~

a tuning fluid disposed within the first fluid chamber, the second fluid chamber, ~~[[and]] the tuning port, the first plurality of stages, and the second plurality of stages.~~

26. **(Original)** The vibration isolator according to claim 25, wherein the actuator is a piezoelectric actuator.

27. **(Original)** The vibration isolator according to claim 25, wherein the individual stages of the first plurality of stages and the individual stages of the second plurality of stages are configured in an alternating arrangement.

28. **(Currently Amended)** A vibration isolator comprising:

a first housing;

a first, multistage piston resiliently disposed within the first housing, the first, multistage piston, being configured to define a first plurality of stages in fluid communication with a first fluid chamber, and a second plurality of stages in fluid communication with a second fluid chamber;

a second housing;

a second piston resiliently disposed within the second housing, the second piston being adapted for connection to a first body;

at least one actuator coupled to the first, multistage piston for selectively transferring forces to the first, multistage piston;

a first fluid chamber and a second fluid chamber, each being defined by the second housing, ~~the first, multistage piston, and the second piston;~~

at least one tuning port in fluid communication with both the first fluid chamber and the second fluid chamber; and

a tuning fluid disposed within the first fluid chamber, the second fluid chamber, and the tuning port;

wherein the at least one actuator is configured to actively augment vibration attenuation of the vibration isolator.

29.-44. **(Cancelled).**

The Applicant submits that the foregoing amendments add no new matter to the application.